FIG. 1

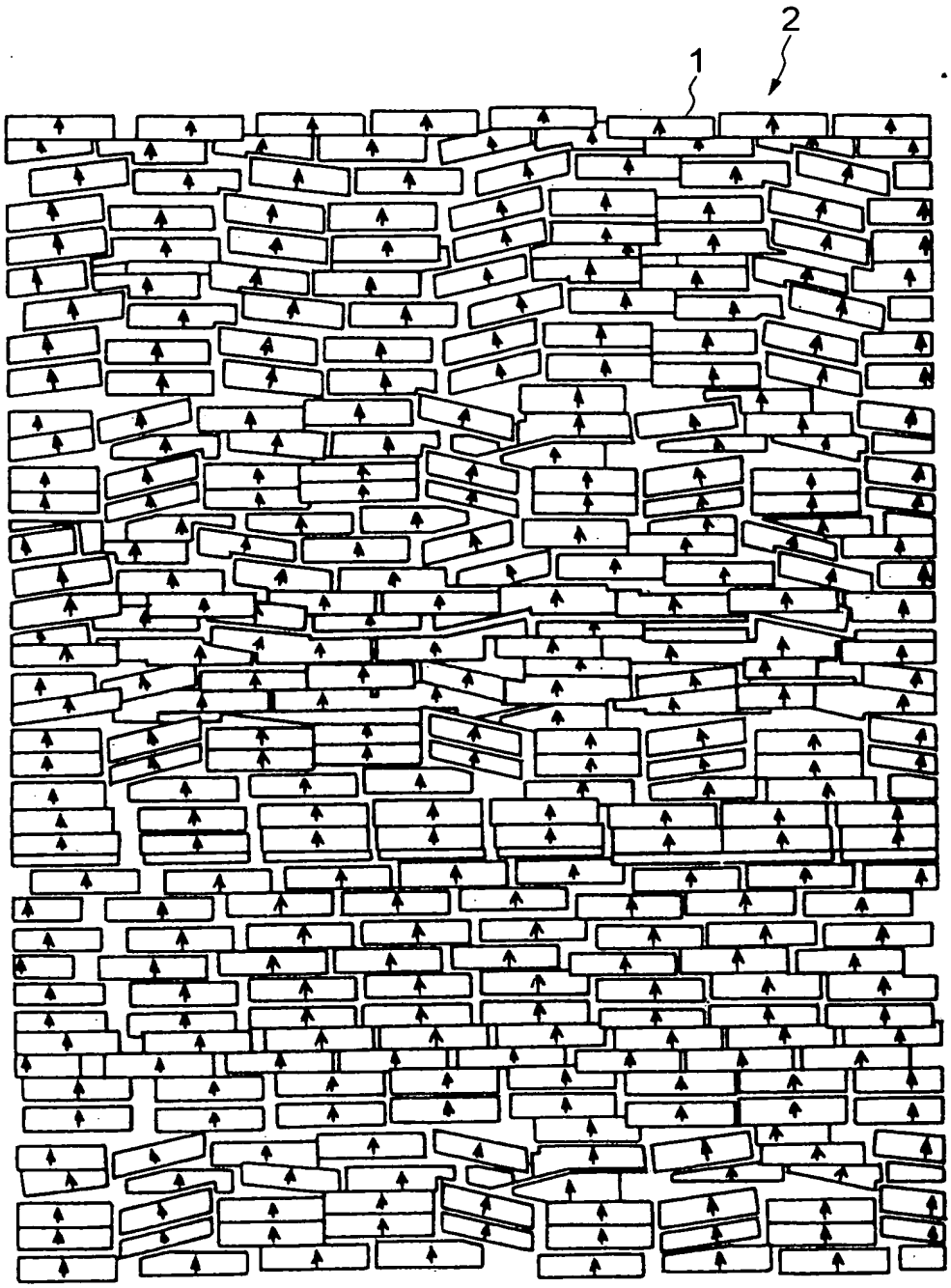


FIG. 2A

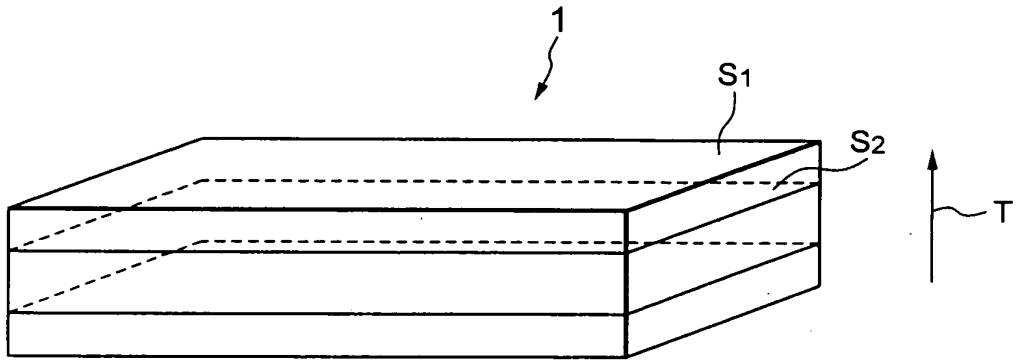


FIG. 2B

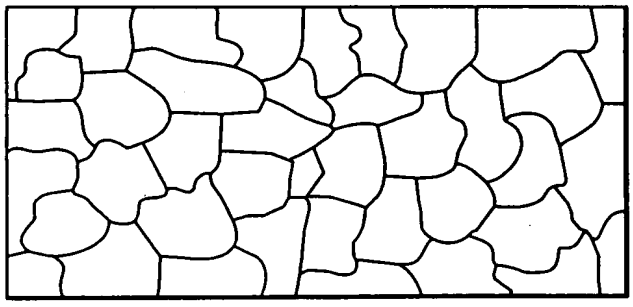


FIG. 3

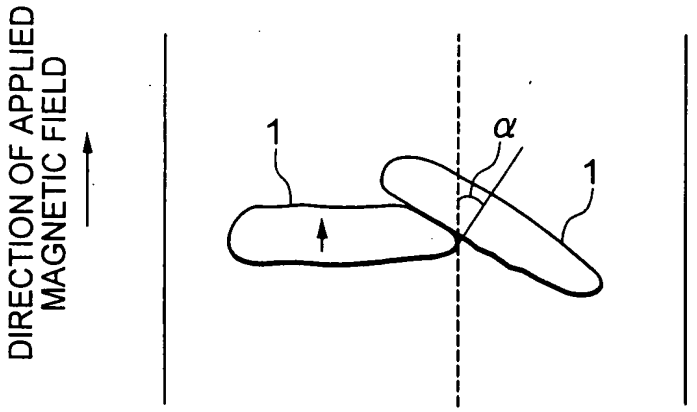

DIRECTION OF APPLIED MAGNETIC FIELD
1
α
1

FIG. 4

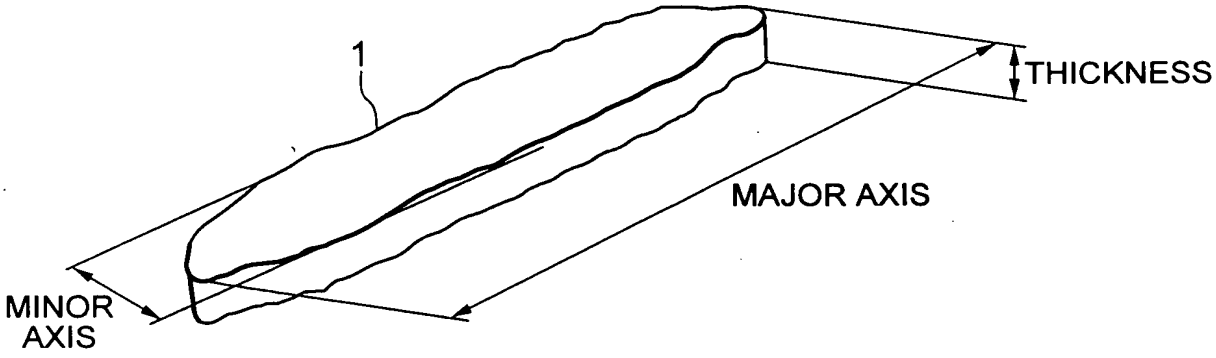

1
THICKNESS
MAJOR AXIS
MINOR AXIS

FIG. 5A

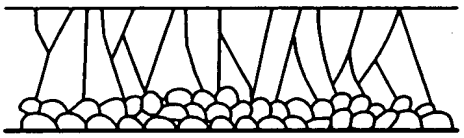


FIG. 5B

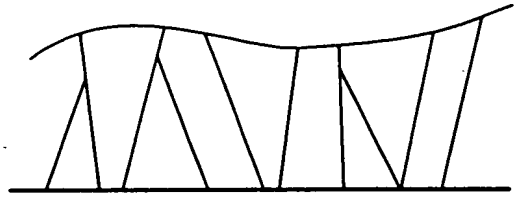


FIG. 5C

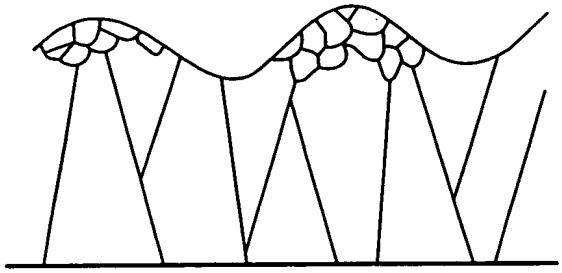


FIG. 6

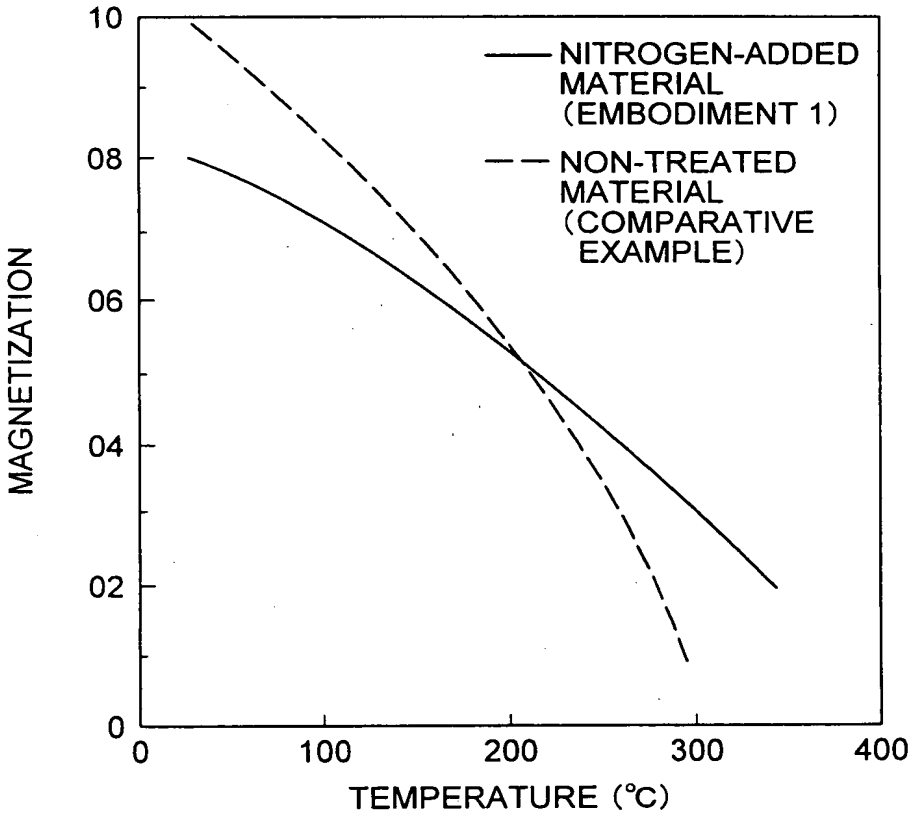

10
08
06
04
02
0
MAGNETIZATION
0
100
200
300
400
TEMPERATURE (°C)
NITROGEN-ADDED MATERIAL (EMBODIMENT 1)
NON-TREATED MATERIAL (COMPARATIVE EXAMPLE)

FIG. 7

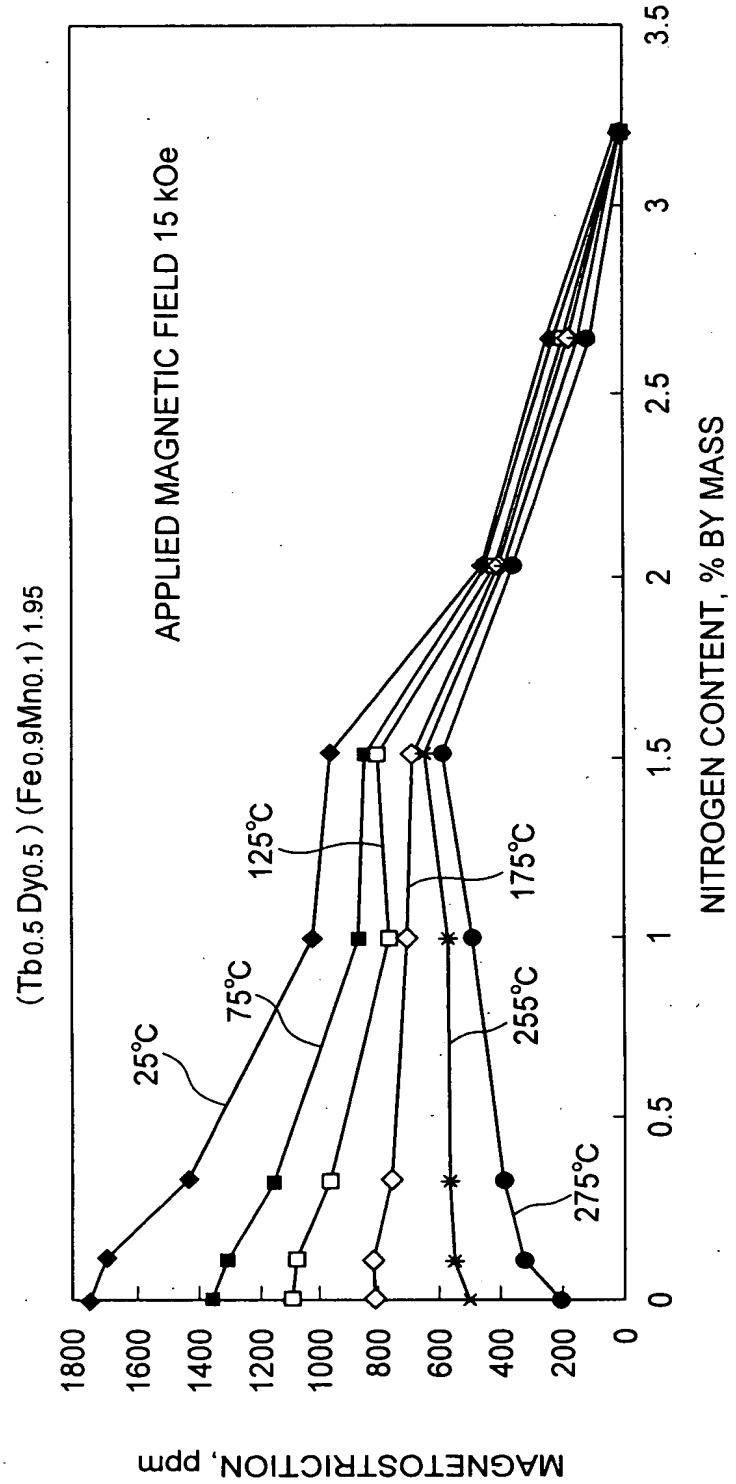

(Tb0.5Dy0.5)(Fe0.9Mn0.1)1.95
APPLIED MAGNETIC FIELD 15 kOe
25°C
75°C
125°C
175°C
255°C
275°C
MAGNETOSTRICTION, ppm
NITROGEN CONTENT, % BY MASS
0
200
400
600
800
1000
1200
1400
1600
1800
0
0.5
1
1.5
2
2.5
3
3.5

FIG. 8

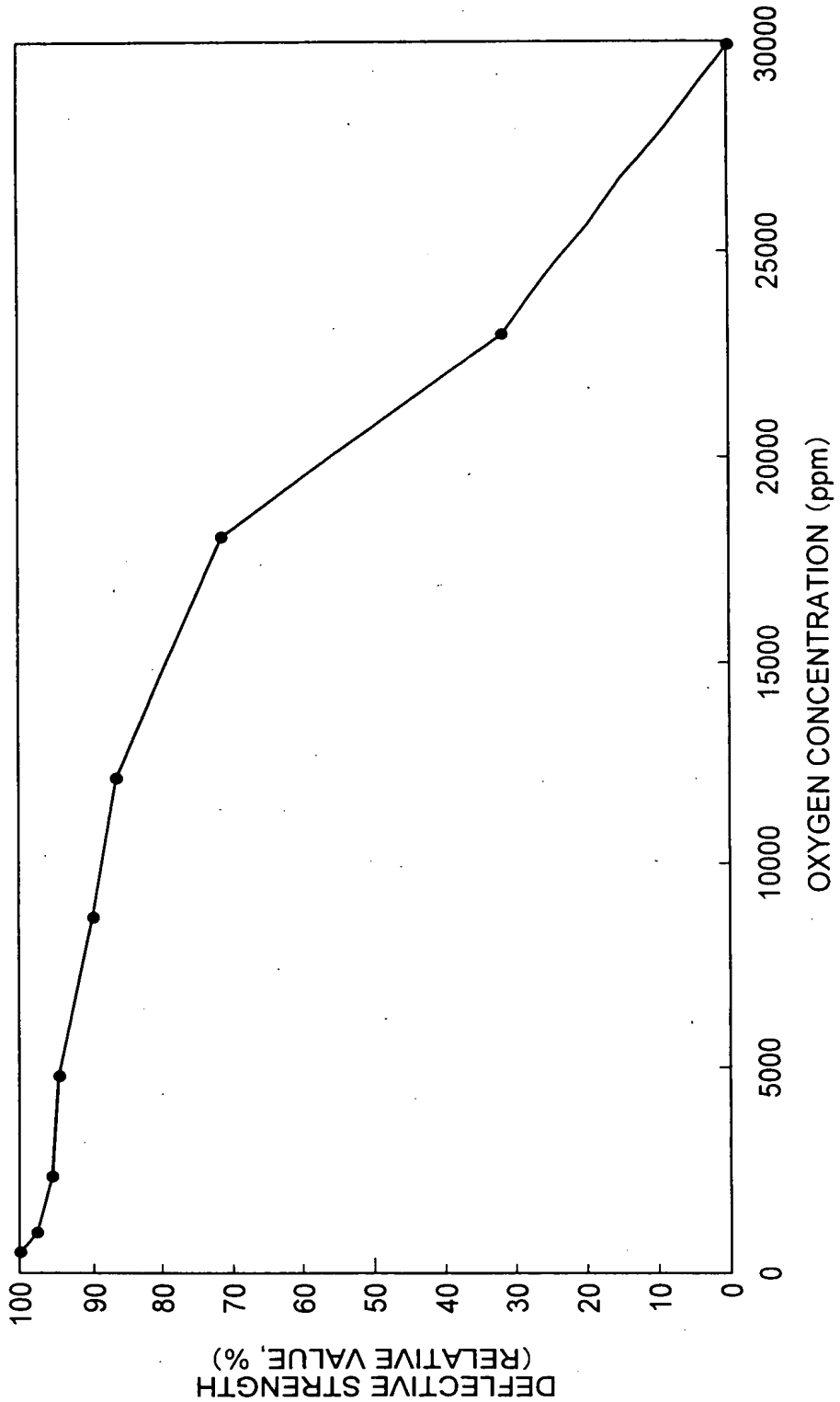

DEFLECTIVE STRENGTH
(RELATIVE VALUE, %)
100
90
80
70
60
50
40
30
20
10
0
0
5000
10000
15000
20000
25000
30000
OXYGEN CONCENTRATION (ppm)

FIG. 9

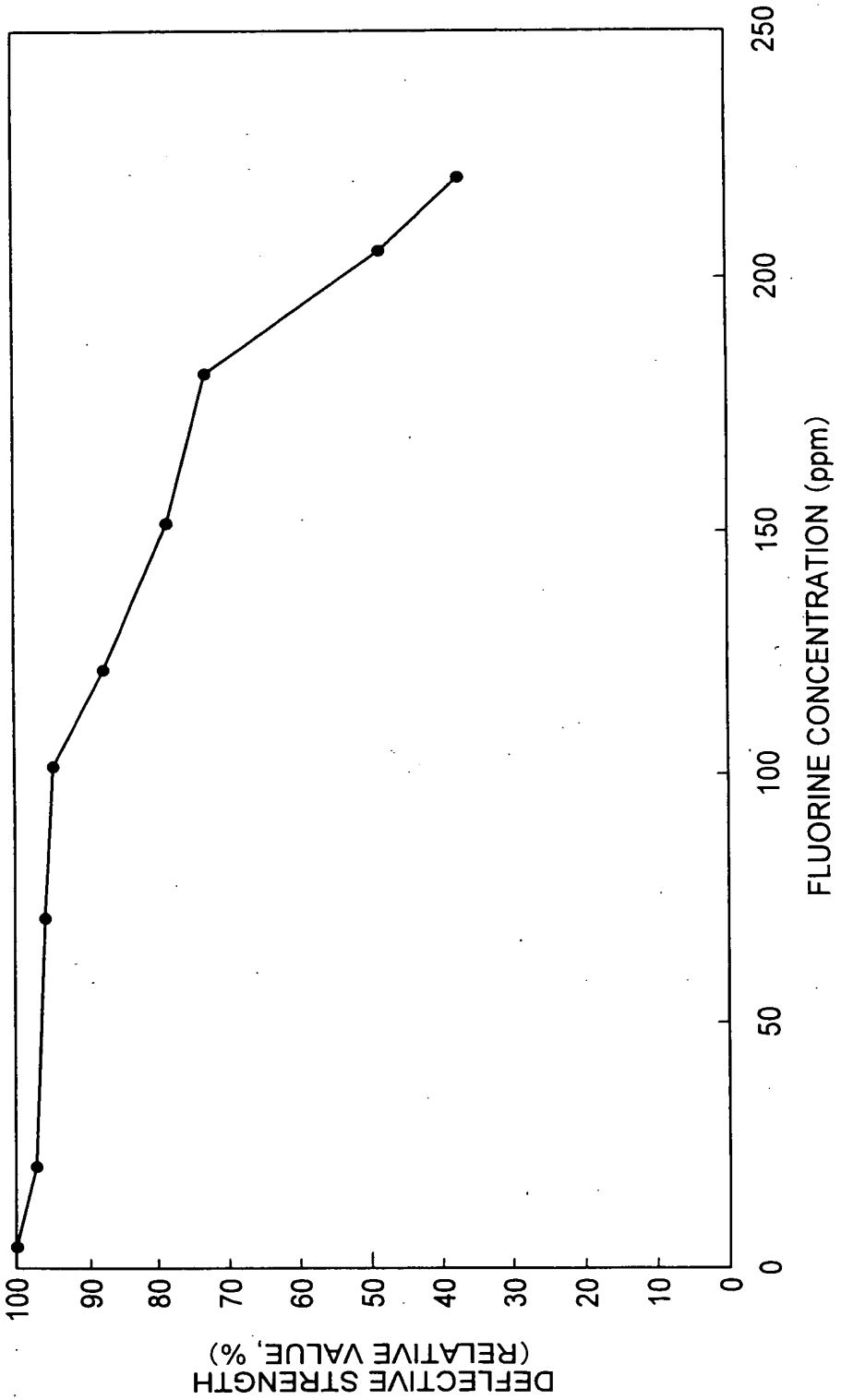

DEFLECTIVE STRENGTH
(RELATIVE VALUE, %)
100
90
80
70
60
50
40
30
20
10
0
0
50
100
150
200
250
FLUORINE CONCENTRATION (ppm)

FIG. 10

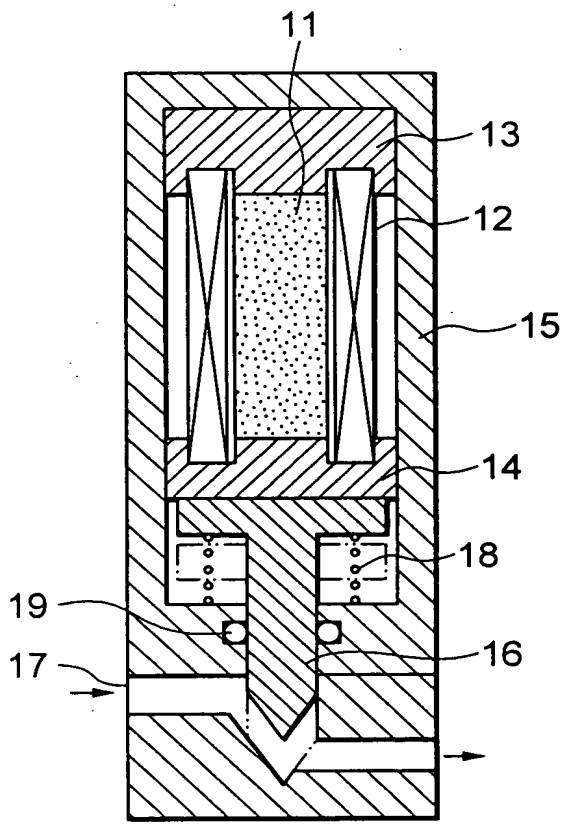


FIG. 11

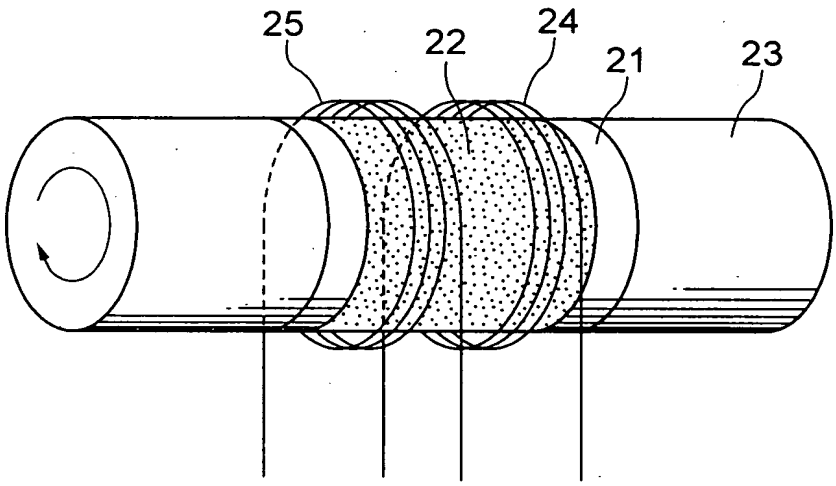
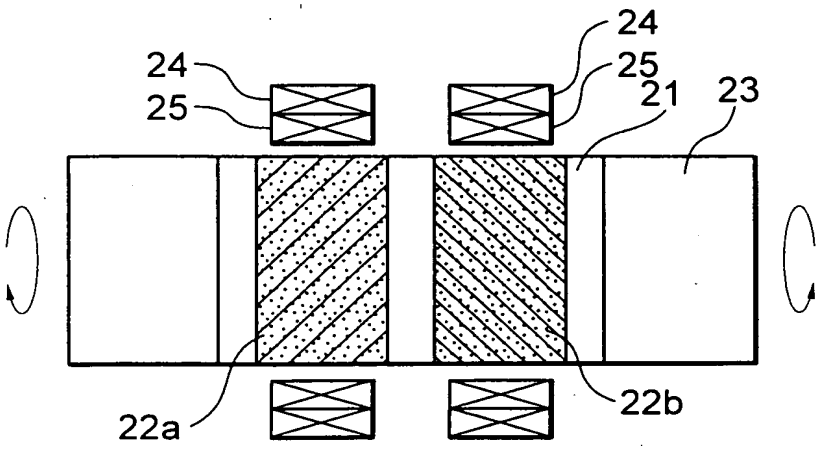


FIG. 12



+45° ANISOTROPIC −45° ANISOTROPIC

FIG. 13

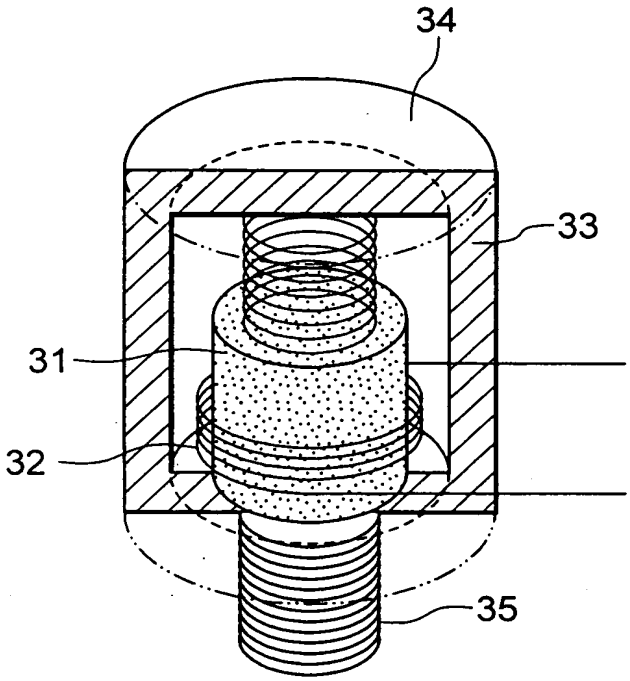


FIG. 14

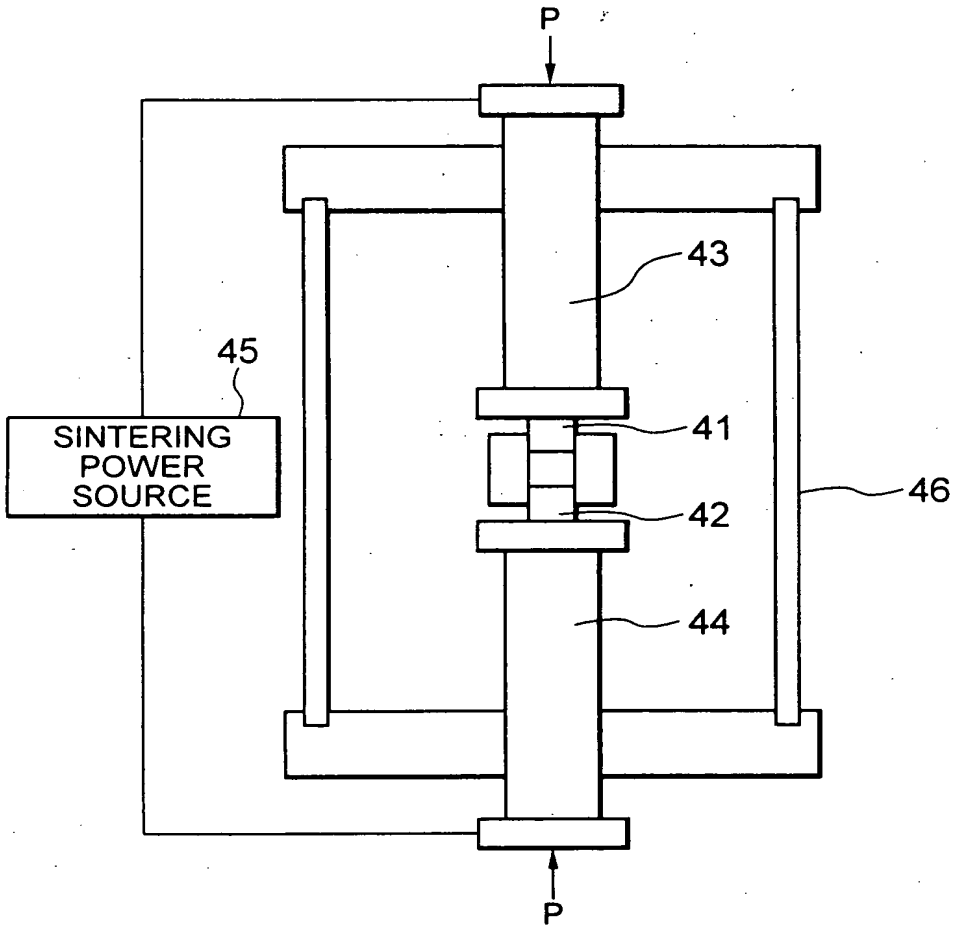


FIG. 15

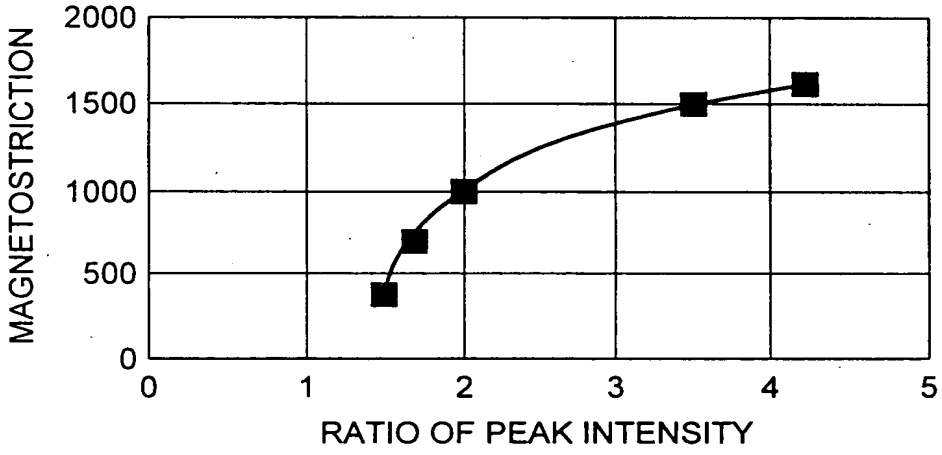

MAGNETOSTRICTION
2000
1500
1000
500
0
0
1
2
3
4
5
RATIO OF PEAK INTENSITY

FIG. 16

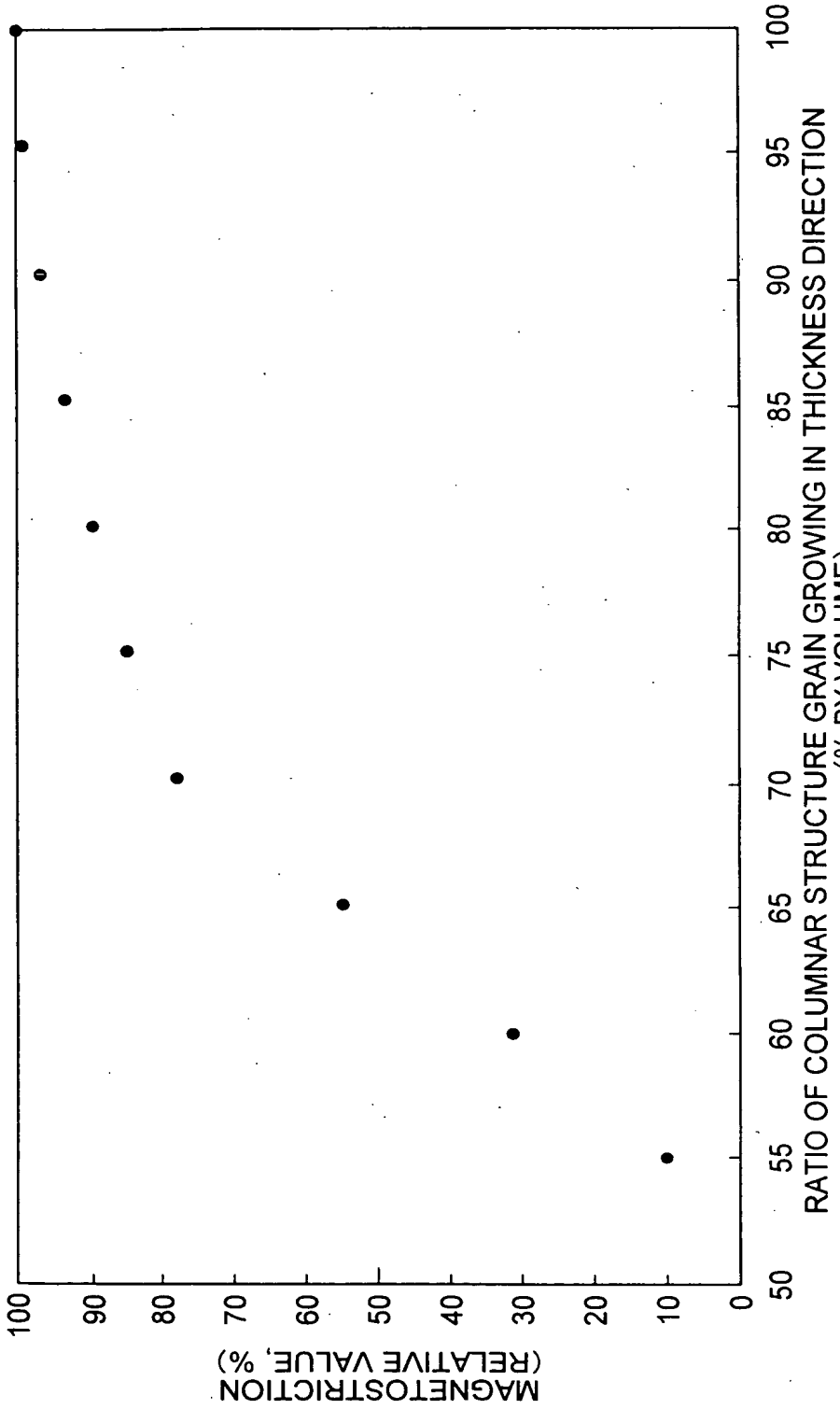

MAGNETOSTRICTION
(RELATIVE VALUE, %)
100
90
80
70
60
50
40
30
20
10
0
50
55
60
65
70
75
80
85
90
95
100
RATIO OF COLUMNAR STRUCTURE GRAIN GROWING IN THICKNESS DIRECTION
(% BY VOLUME)

FIG. 17

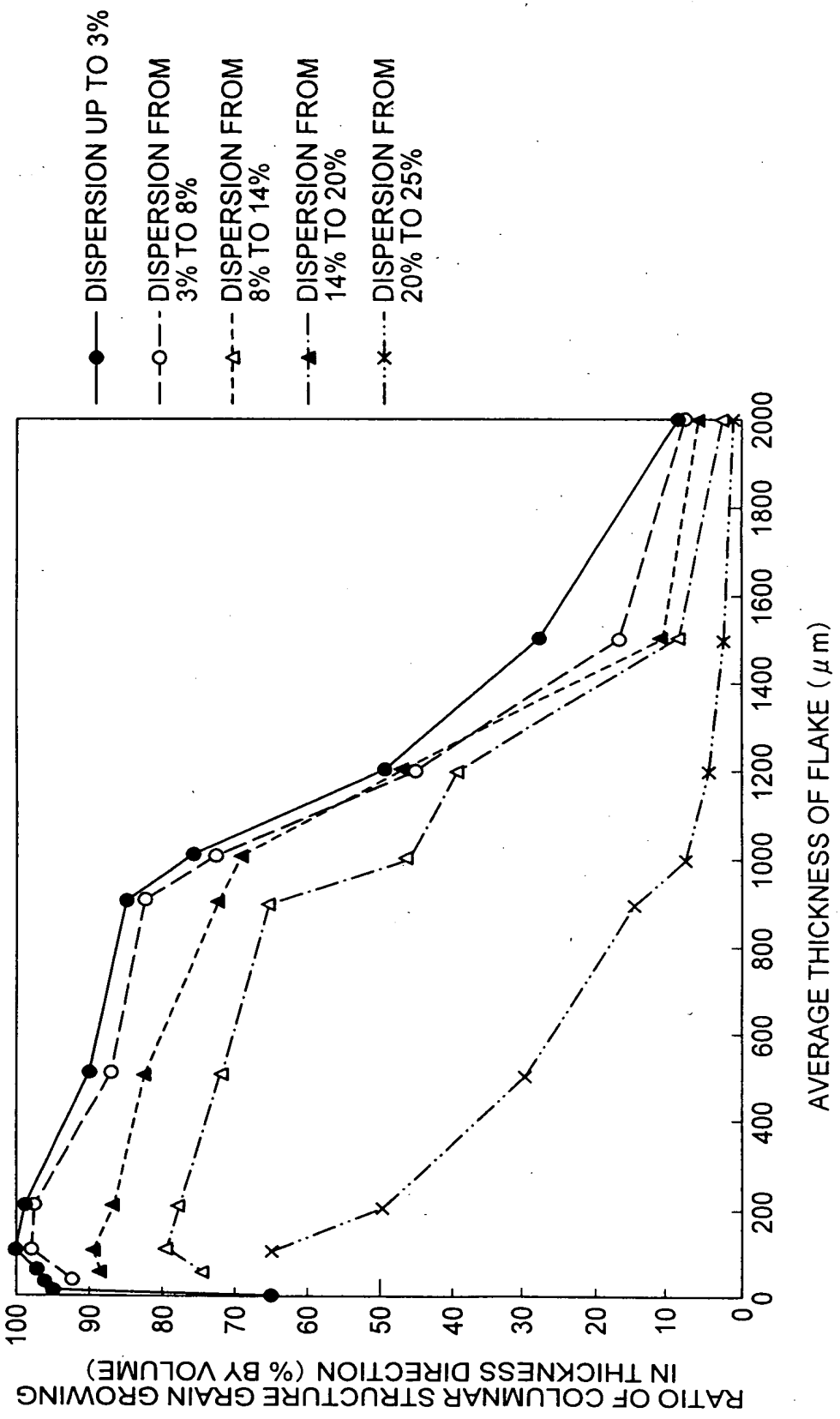

DISPERSION UP TO 3%
DISPERSION FROM 3% TO 8%
DISPERSION FROM 8% TO 14%
DISPERSION FROM 14% TO 20%
DISPERSION FROM 20% TO 25%
RATIO OF COLUMNAR STRUCTURE GRAIN GROWING IN THICKNESS DIRECTION (% BY VOLUME)
0
10
20
30
40
50
60
70
80
90
100
AVERAGE THICKNESS OF FLAKE (μm)
0
200
400
600
800
1000
1200
1400
1600
1800
2000

FIG. 18

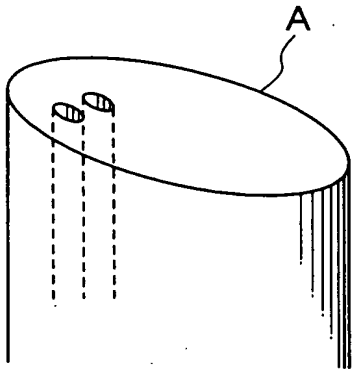


FIG. 19